

# Lessons and conclusions from the Paycheck Protection Program

Michael R. Strain

American Enterprise Institute

# Lessons and conclusions

1. PPP seems to have “worked.”
2. Despite PPP’s success, future efforts should be better designed.
3. Despite PPP’s success, future efforts should be better implemented.
4. Future efforts will almost surely not be needed.

# PPP seems to have “worked”

- Findings are preliminary. Please don't cite.
- Dun & Bradstreet data.
  - World's largest commercial database. Clients include 90 percent of the Fortune 500 and every cabinet agency.
- Sample:
  - All establishments that were active in June 2019.
  - We assign size categories based on employment in February 2020.
  - We know whether firms were approved for a PPP loan.
  - For some firms, we know information on profits.

# PPP seems to have “worked”

$$y_{i,t} = \alpha + \sum_{t \neq \text{March 2020}}^9 \beta_t (PPP_i \times \delta_t) + PPP_i + \delta_t + \delta_{s,t} + \delta_{j,t} + \delta_s + \delta_j + \varepsilon_{i,t}$$

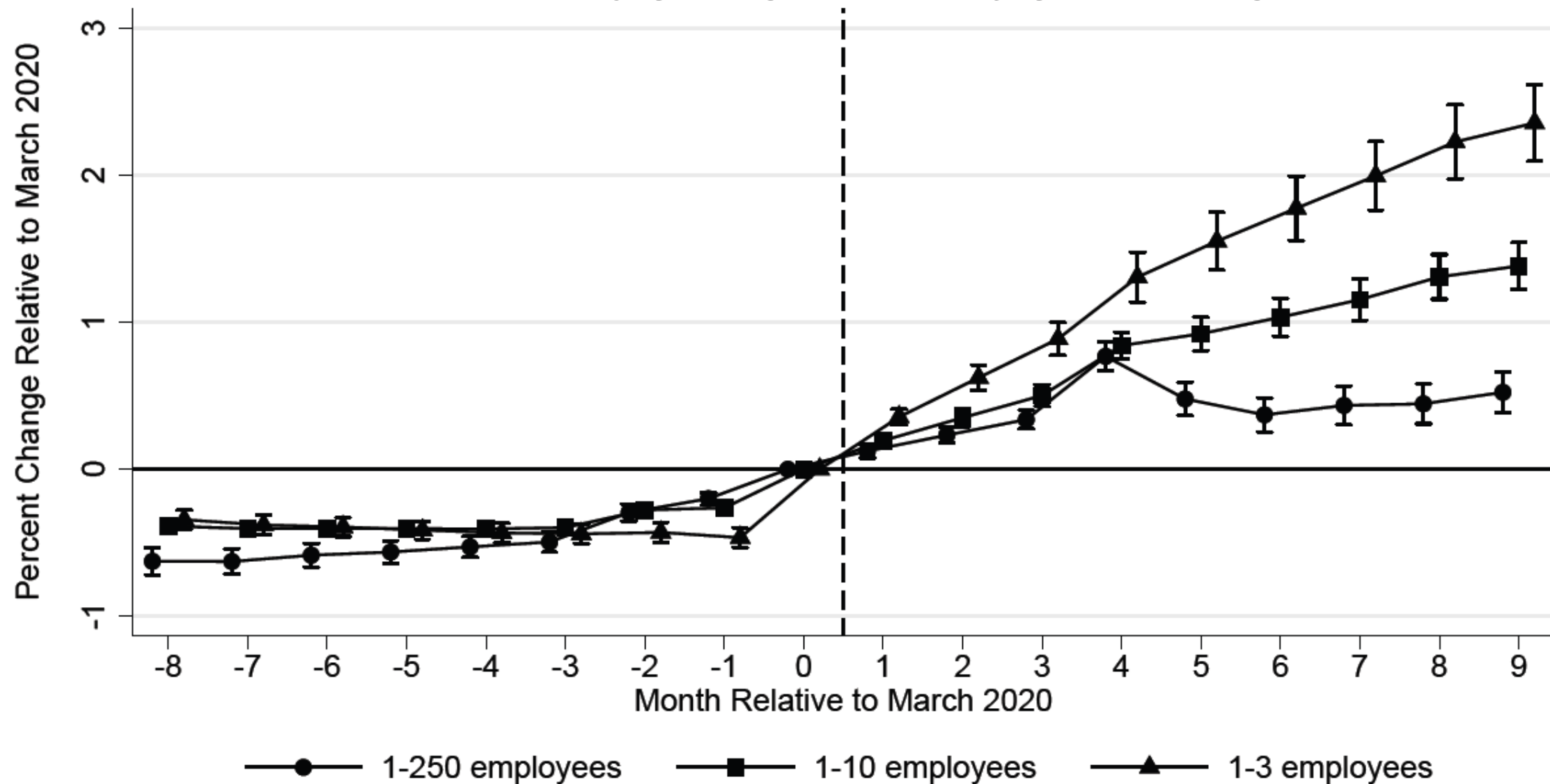
- $y_{i,t}$  is the log of employment at establishment  $i$  in month  $t$ .
- $PPP_i$  indicates whether establishment  $i$  was approved for a PPP loan.
- Controls include state-by-month and industry-by-month effects.

# PPP seems to have “worked”

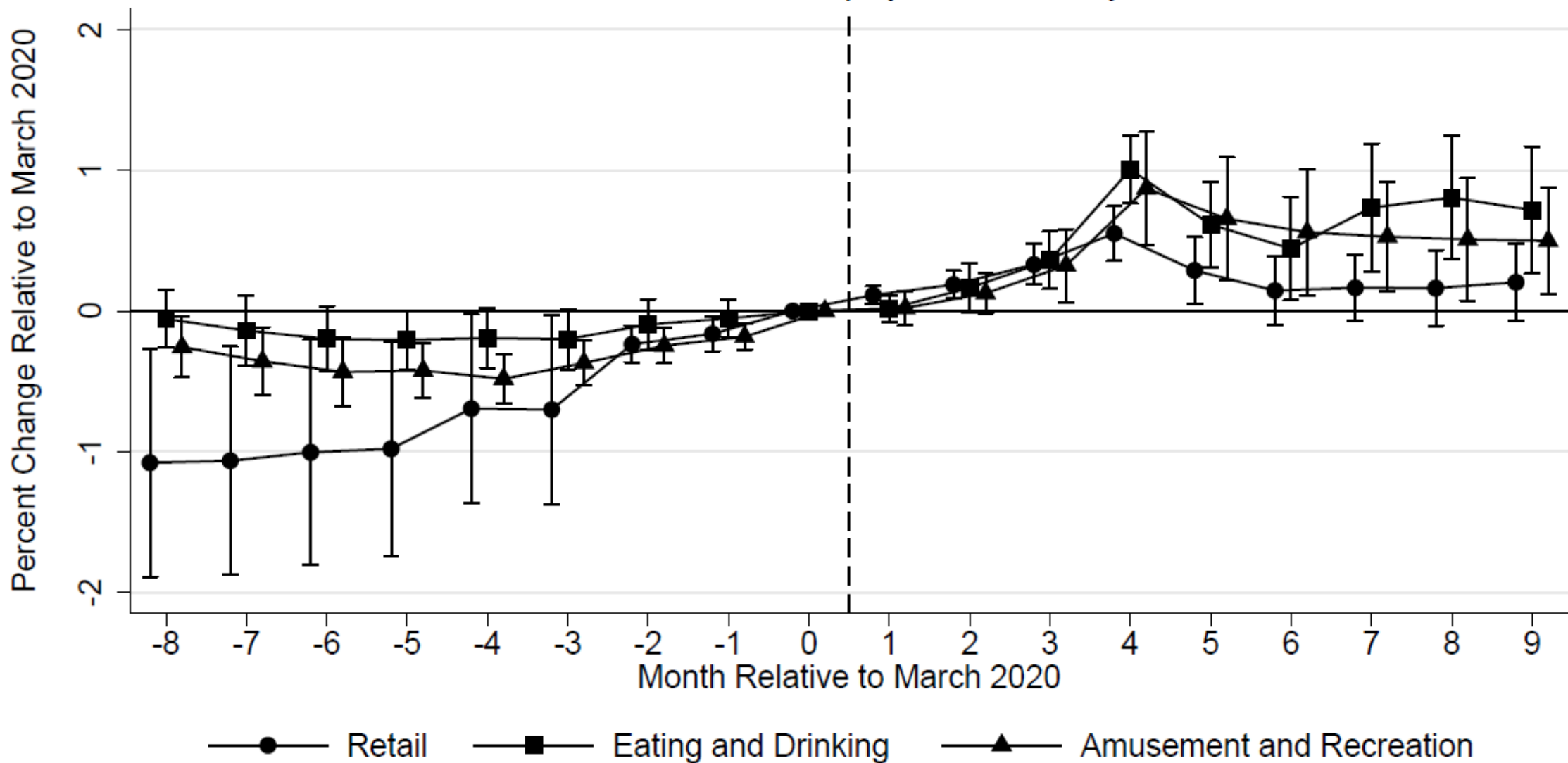
Four conclusions:

1. PPP supported employment.
2. PPP supported employment over the medium term.
3. PPP had a larger employment effect on relatively smaller firms.
4. PPP seems to have supported employment among the “right” firms.

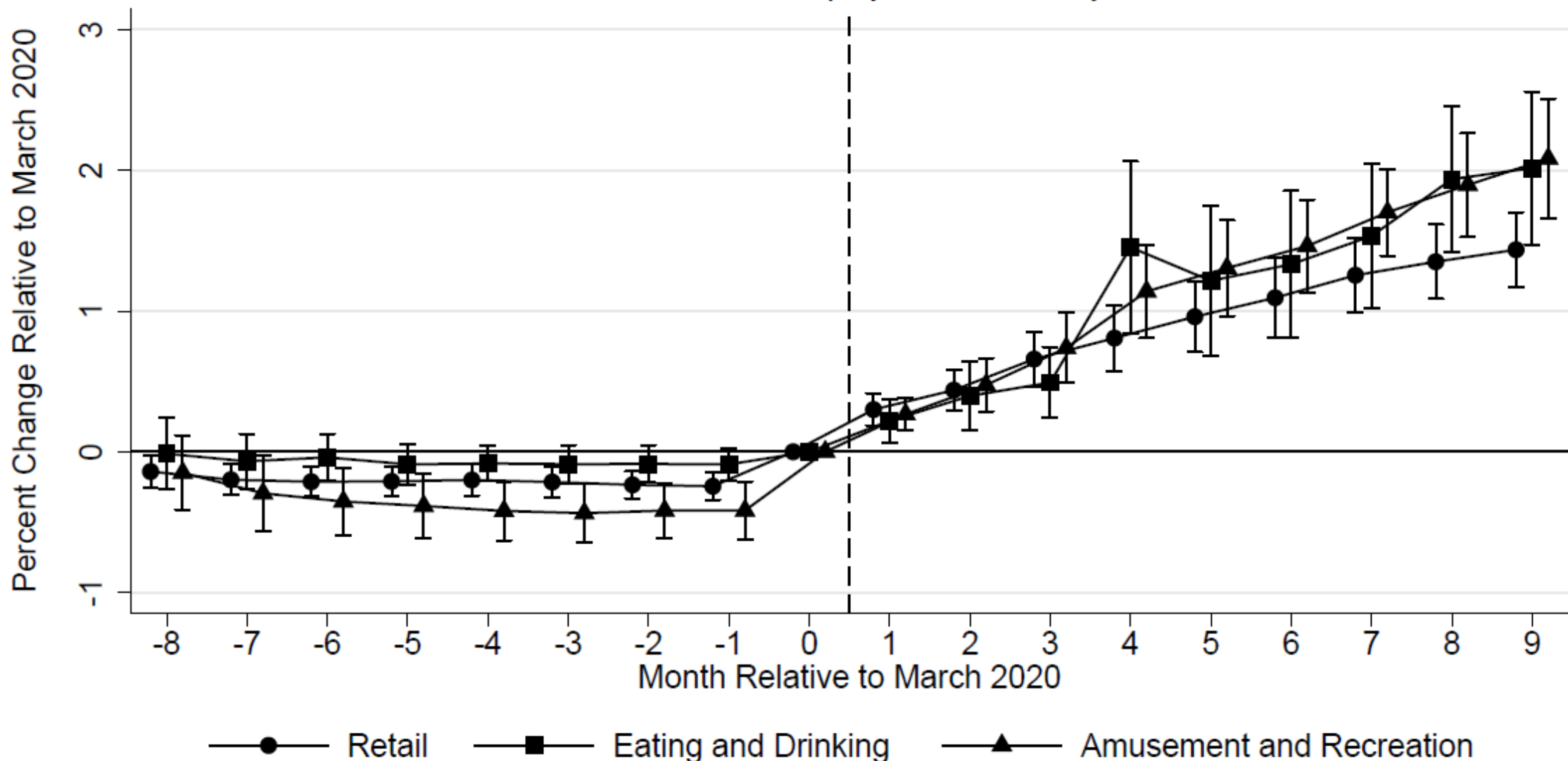
Effects of PPP Loans on Employment by Number of Employees in February 2020



Effects of PPP Loans on Employment by Industry  
for Establishments with 1-250 Employees in February 2020



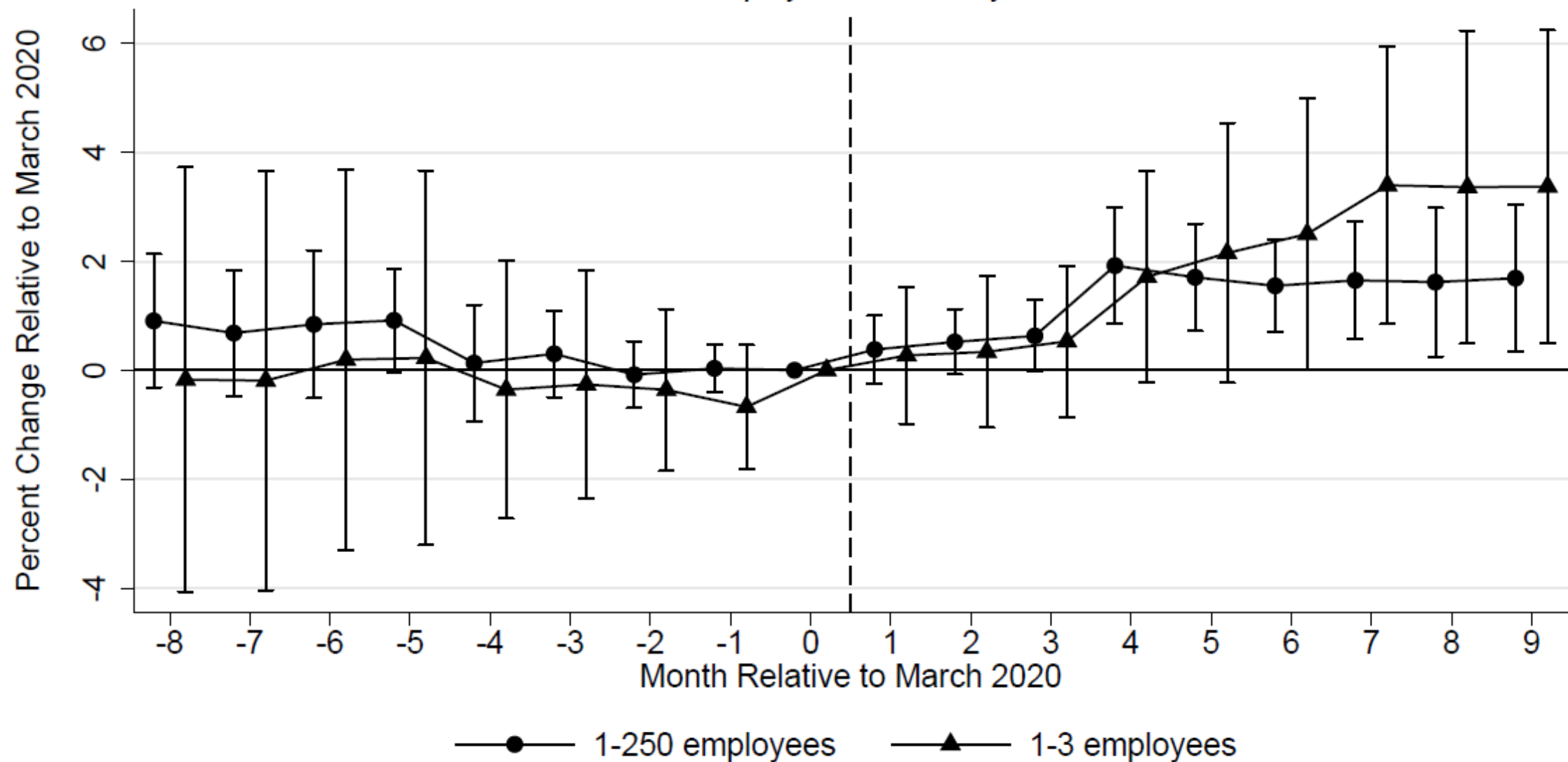
Effects of PPP Loans on Employment by Industry  
for Establishments with 1-3 Employees in February 2020





Did PPP support employment among the  
“right” firms?

Effects of PPP Loans on Employment by Number of Employees and Profit Per Employee in February 2020



# Future efforts should be better designed

- Focus on smaller firms.
- Focus on service-sector firms.
- Greater focus on revenue replacement and less on payroll expenses.
- PPP was designed for a short shutdown that would be followed by a strong and rapid recovery. That is not what happened. The program needed to facilitate the transition from the “freeze the economy in place” stage to the “allow labor to reallocate across firms and industries” stage. Less focus on pre-pandemic levels of employment would have helped.

# Future efforts should be better implemented

- Treasury/SBA should have done more to make banks feel comfortable participating in the program.

# Future efforts will almost surely not be needed

